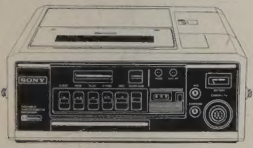
SONY®

VIDEOCASSETTE RECORDER Betamax

SLO-340

This machine can be used with any videocassette tapes having the mark B.



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METROLOGY LAB.
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FROM AREA

OPERATING INSTRUCTIONS

The operating instructions found herein are supplemented by a set of separately-bound ready-reference cards. Detailed instructions found in this booklet offer complete directions for overall system connections, as well as detailed descriptions for the use of all viewer controls.

OWNER'S RECORD

The model and serial numbers are located at the rear of the recorder and AC Power Adaptor. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding these products.

Model No. SLO-340 Serial No. _____

AC-340 _____

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WARNING

To prevent fire or shock hazard, do not expose the set to rain or moisture.
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

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FEATURES

Three-way power operation
This recorder may be powered by a BP-60 rechargeable battery pack (optional), ac power with the AC-340 AC Power Adaptor (supplied) or a car battery with the DCC-3000 Car Battery Adaptor (optional).

Complete portability and versatility
The AC Power Adaptor is separated from the recorder to make the system more portable. The recorder may be operated in either a vertical or a horizontal position. The recorder is free of gyroscopic.

Ease of operation
As easy to operate as an audio cassette recorder. Merely insert a videocassette and depress one button. Selection of input signals. and color or monochrome mode are made automatically.

Color/monochrome record and playback
EIA standard monochrome and NTSC color signals can be recorded and played back.

Automatic control of recording level
The automatic gain control circuits maintain proper video and audio levels, assuring optimum recording.

Audio dubbing
Audio (commentary, music, etc.) may be added to video recordings made earlier.

Playback into a conventional TV receiver
The picture and sound of a recorded videocassette may be viewed on a regular TV.

Playback through the viewfinder
The playback picture can be immediately displayed on the camera viewfinder.

Pause operation
The tape may be momentarily stopped in the record, audio dub or playback mode. A stop-action picture is displayed in the pause mode.

Moisture eliminator

If moisture condenses inside the machine during ac operation, a built-in moisture sensor detects it and automatically activates an evaporation to prevent possible tape damage.

Small videocassette

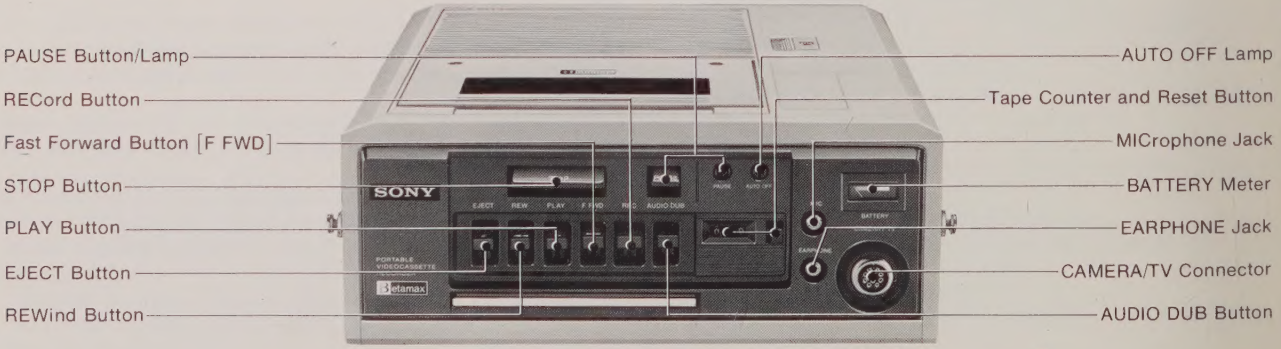
A playing time of up to one hour is possible with the small Betamax L-500 videocassette.

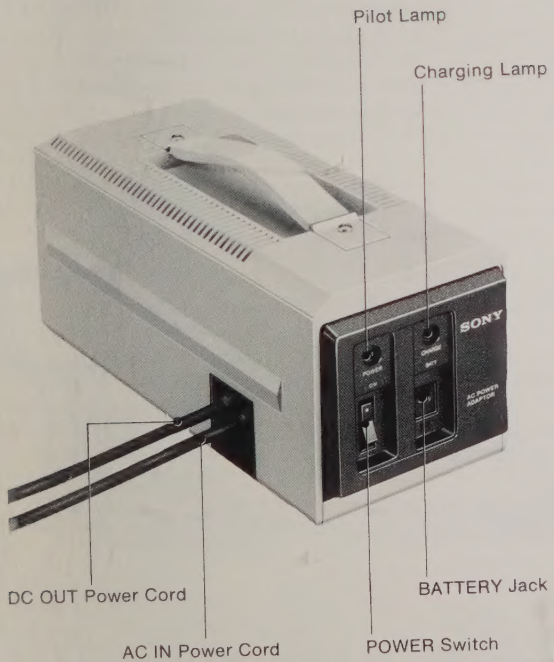
GENERAL NOTES

- Operate the set on 12 V dc or 120 V ac using the AC-340 supplied (do not use any other ac adaptor).
- Do not install the unit in a location near heat sources, such as radiators or air ducts, or in places subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Allow adequate air circulation to prevent internal heat buildup. Do not place the set on soft surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Keep the set and the videocassette away from strong magnetic fields.
- After playing a tape, remove the cassette from the compartment if the set will not be used for any length of time.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Head-cleaning is not a routine maintenance procedure and should not be performed by the user. Should snow or streaks appear in the playback picture (see page 11), consult your dealer or Sony service station.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Save the original shipping carton and packing material: they will come in handy if you ever have to ship the set. For maximum protection, repack the set as it was originally packed at the factory.

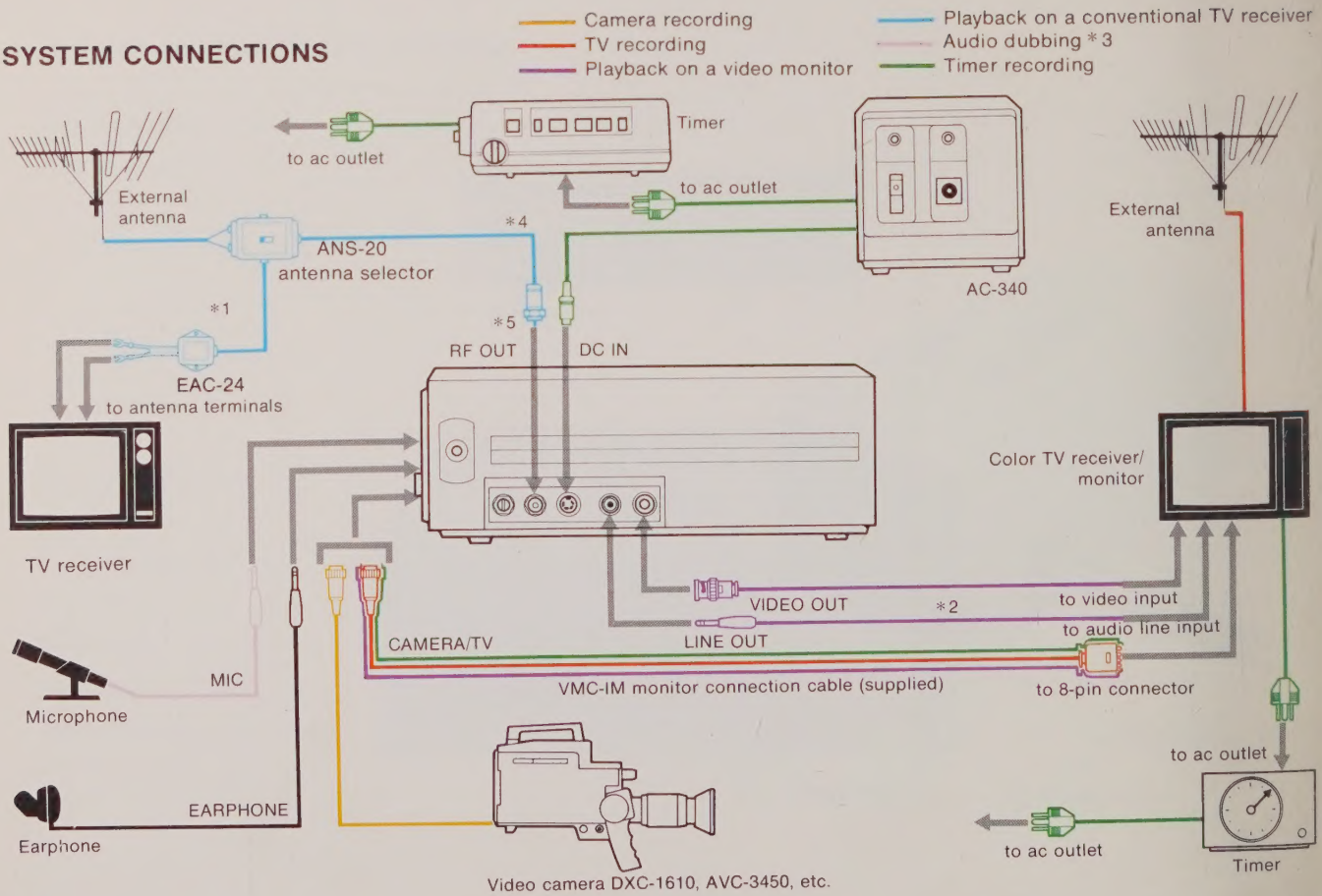
LOCATION OF PARTS AND CONTROLS

[Right side view]




Pilot Lamp
Charging Lamp
SONY
DC OUT Power Cord
AC IN Power Cord
POWER Switch
BATTERY Jack

SYSTEM CONNECTIONS



*1 If the TV receiver is equipped with a 75-ohm antenna terminal, connect the antenna selector directly to the receiver. If the TV receiver is equipped only with 300-ohm antenna terminals, connect the ANS-20 to a TV receiver through the EAC-24.

*2 If the monitor is equipped with an 8-pin connector, connect it to the VIDEO OUT connector on the recorder with the VMC-1M cable (supplied). If it is not, connect the VIDEO OUT and LINE OUT connectors on the recorder to the video and audio input connectors on the monitor with 75-ohm coaxial and shielded cables, respectively.

*3 When dubbing audio, either a video monitor or a TV receiver may be used to monitor the recorded videocassette.

*4 The Sony RFC-8 extension cable (8 m) is available as an optional accessory.

*5 CAUTION

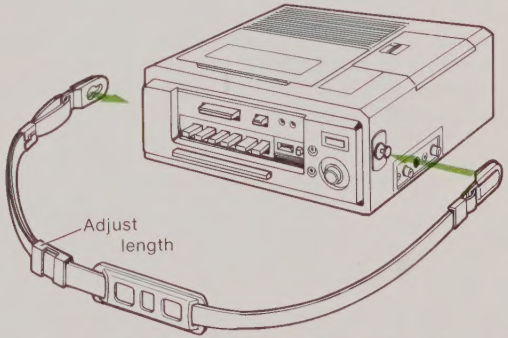
Connection between the SLO-340 RF OUT connector and the antenna terminals of a TV receiver should be made only as shown in these instructions. Failure to do so may result in operation that violates the regulations of the Federal Communications Commission regarding the use and operation of rf devices. Never connect the output of the SLO-340 to an antenna or make simultaneous (parallel) antenna and SLO-340 connections at the antenna terminals of the receiver.

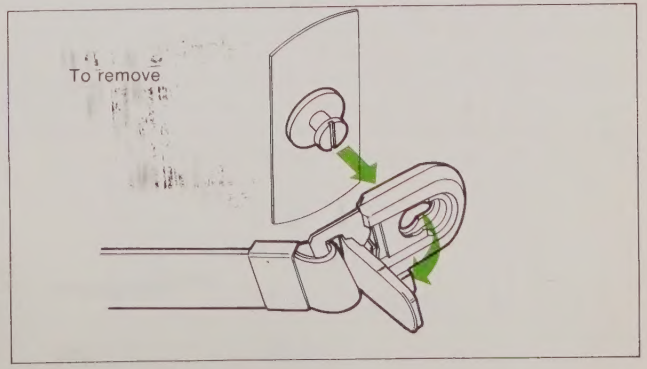
- For details on power sources and connections for each operating mode, refer to the accompanying ready-reference cards.

OPERATION

SHOULDER STRAP ATTACHMENT

The shoulder strap (supplied) is attached to the recorder as shown below.



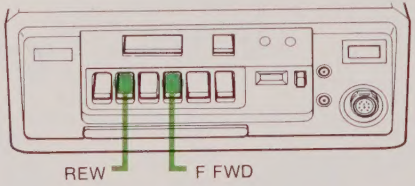


REWIND AND FAST FORWARD

Rewind and fast forward may be selected after the machine has been placed in the stop mode.

When the tape has reached the end of the rewind or fast-forward operation, it stops automatically and REW or F FWD button will be released. The tape may be stopped at any point during rewind or fast forward by pressing the STOP button.

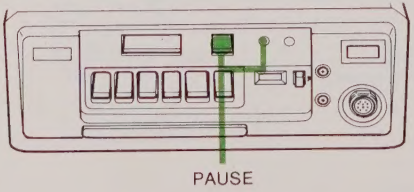
- During rewind or fast forward, no picture nor sound comes on.



PAUSE

To stop the tape momentarily during record or playback, press the PAUSE button. The green lamp will light. If the PAUSE button is pressed during playback, a still picture can be obtained in the pause mode. (A "snowy" band of noise that may appear in the still-frame picture may be improved by pressing the PAUSE button several times to move the noise as far out of the picture as possible.)

To restart the tape, press the PAUSE button again.



To start recording or dubbing audio from pause, press the PAUSE button during playback. Holding the PLAY button, press the REC or AUDIO DUB button, then press the PAUSE button again. Recording will begin immediately.

(In normal operation, recording is initiated by simply pressing the REC button. However, in this case, both the REC and PLAY buttons will remain depressed during recording.)

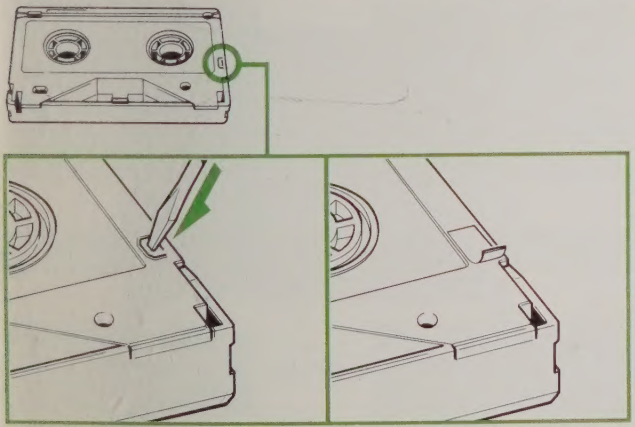
- The pause mode will automatically be released after about 7 minutes, and the recorder will revert to the stop mode.
- Recordings made with the use of the PAUSE button may exhibit momentary instability in playback at the point the pause mode was initiated.
- During camera-record operations, recording can be started or stopped at the camera, regardless of the setting of the PAUSE button on the recorder.
- During playback, the pause mechanism may be activated even if the camera is connected.
- When no signal source is connected to the recorder, and the machine is set in the record mode, the pause mechanism will not function.

TAPE COUNTER

Reset the tape counter by depressing the reset button before starting a recording for later reference in playback.

VIDEOCASSETTE SAFETY TAB

To protect a recording from accidental erasure, break off the tab on the bottom of the videocassette using a screwdriver or similar device. With the tab removed, the REC button cannot be pressed. If you wish to record on a cassette with the tab removed, simply cover the hole with a piece of cellophane or vinyl tape.



TRACKING ADJUSTMENT

In the unlikely event that streaks of snow appear in the playback of tapes made on other recorders, turn the TRACKING control with a screwdriver or similar device in either direction until the best picture is obtained. Allow a second or two for new settings to take effect. When playback of this particular tape is finished, return the TRACKING control to its center detent position.

AUTOMATIC SHUTOFF MECHANISM

The tape transport will stop and power will be shut off automatically in the following cases:

(a) at the end of the tape.

(b) when the slack-tape sensor detects faulty tape motion.

(c) when the head drum stops rotating.

(d) when the battery discharges below the normal operating voltage.

(e) when the moisture sensor is activated (see "AUTO OFF INDICATOR".)

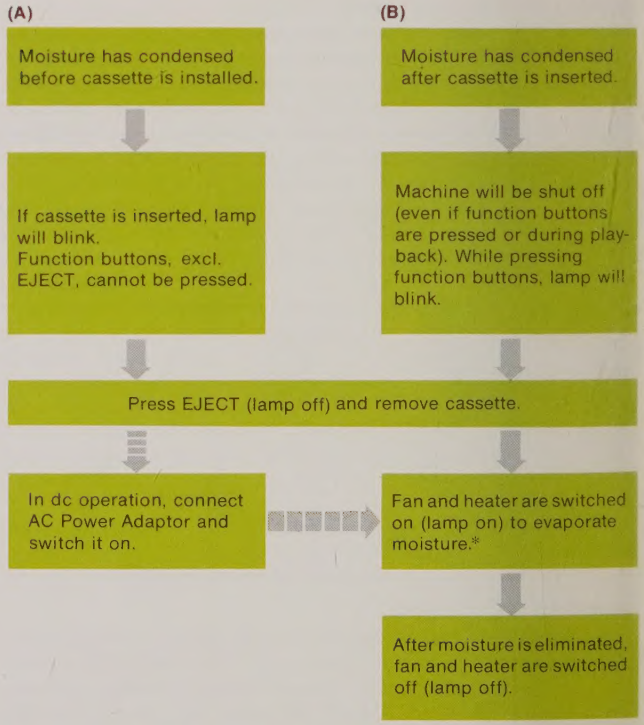
AUTO OFF INDICATOR

If the set is moved directly from a cold to a warm location, moisture condensation may occur. This may cause a tendency for the tape to stick to the head drum. To prevent possible damage under this condition, the AUTO OFF lamp will blink in the manner as described in the following chart.

If the AUTO OFF lamp blinks, press the EJECT button and remove the cassette. The moisture will be evaporated by a fan and heater built into the recorder, in ac operation only. During this operation, the AUTO OFF lamp remains on. In dc operation, connect the AC Power Adaptor and turn on the adaptor to evaporate the moisture as mentioned above.

When the moisture is eliminated, the fan and heater will turn off automatically (as evidenced by the AUTO OFF lamp extinguishing) and the machine may be operated normally.

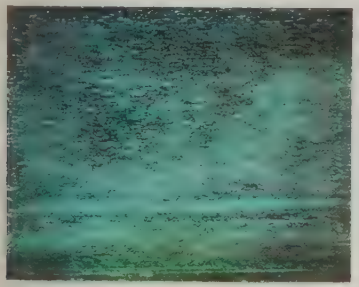
AUTO OFF lamp and moisture eliminator in ac operation


(A)
(B)
Moisture has condensed before cassette is installed.
Moisture has condensed after cassette is inserted.
If cassette is inserted, lamp will blink.
Function buttons, excl. EJECT, cannot be pressed.
Machine will be shut off (even if function buttons are pressed or during playback). While pressing function buttons, lamp will blink.
Press EJECT (lamp off) and remove cassette.
In dc operation, connect AC Power Adaptor and switch it on.
Fan and heater are switched on (lamp on) to evaporate moisture.*
After moisture is eliminated, fan and heater are switched off (lamp off).

* During this operation, it is recommended that the cassette compartment be kept in the raised position to shorten the time required for evaporation.

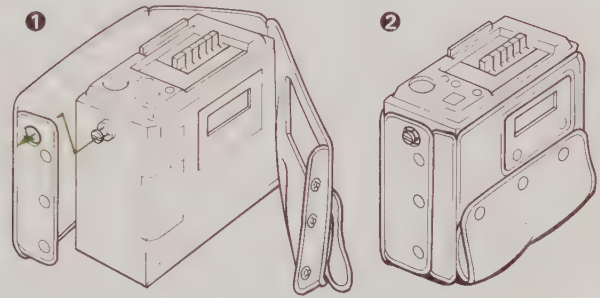
VIDEO-HEAD CLEANING

The appearance of snow or streaks in the playback picture may indicate the need for cleaning the video heads inside the recorder. Should the need for head cleaning be suspected, consult the dealer from whom the set was purchased, or a local Sony authorized service station.

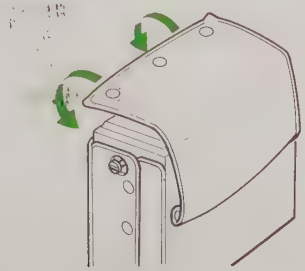


SOFT COVER ATTACHMENT

The soft cover (supplied) will protect the set from dust and scratches. Attach the cover correctly so that the cassette holder is completely ejected.

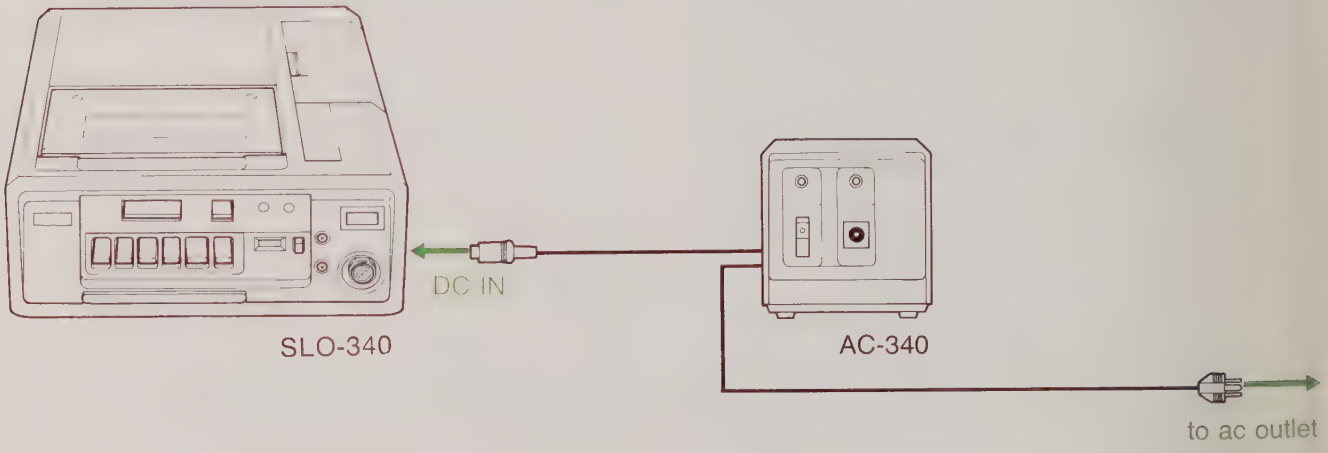


- Attach the shoulder strap as shown on page 7.
- When the set is not used, cover the front panel for protection with the flap as illustrated.



BATTERY CHARGING

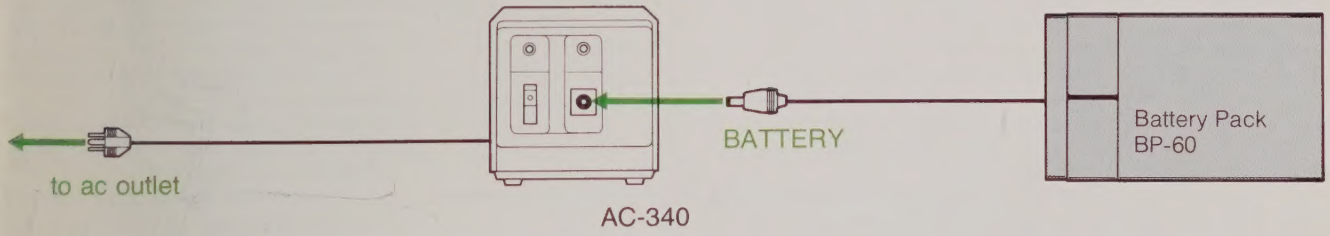
CHARGING THE BATTERY PACK INSIDE THE RECORDER



❶ Press the STOP button on the recorder and turn on the POWER switch of the AC-340; the red charging lamp will light and charging will begin.
❷ When the battery is fully charged, charging will stop and the charging lamp will go out. About 3 hours will be required for full charging.

• Charging time will vary somewhat depending upon the remaining capacity of the battery. Full charge is indicated when the charging lamp goes out.

CHARGING THE BATTERY PACK OUTSIDE THE RECORDER



❶ Take the battery pack out of the recorder.
❷ Turn on the POWER switch of the AC-340; the red charging lamp will light and charging will begin.
❸ When the battery is fully charged, the charging lamp will go out. About 3 hours will be required for full charging.

• Two battery packs may be charged at the same time, one inside and the other outside the recorder. About 6 hours will be required to fully charge two battery packs. The recorder must be in the stop mode during charging.
For details on the battery, refer to the instructions furnished with the BP-60.
• Do not allow the battery to remain discharged for any length of time. A heavily-discharged battery pack may not be restorable. Recharge the battery pack as soon as possible after use.
• When very-heavily discharged batteries are put on charge, the charging lamp will not light, giving an erroneous "full-charge" indication.
Should this occur, allow several hours, or even several days to reach a charging condition as indicated by the charging lamp. Such heavily-discharged batteries may not be rechargeable.
• Do not overcharge..... disconnect a fully-charged battery pack from the AC-340 after about 8 to 24 hours. Overcharging may shorten battery life.
• For best results, charge the batteries in an ambient temperature of 20°C ±10°C (68°F ±18°F).

TECHNICAL SPECIFICATIONS

General

Video recording system	Rotary two-head helical scanning
Video signal	EIA standards, NTSC color
Storage temperature	−20°C to +60°C (−4°F to +140°F)
Operating temperature	0°C to 40°C (32°F to 104°F)
RF output signal	RF OUT: F-type connector Channel 3 or 4 (depending upon the selected operating channel of the RF Unit), 75 ohms, unbalanced
Power requirements	12 V dc ±10% 120 V ac ±10%, 50/60 Hz (using AC-340)
Power consumption	21.5 W (dc) (without camera) 52 W (using AC-340)
Operating position	Vertical or horizontal
Weight	SLO-340: 9.0 kg (19 lb, 13 oz) (incl. battery pack, videocassette, shoulder strap, RFU-534) AC-340: 3.7 kg (8 lb, 3 oz)
Dimensions	SLO-340: 301 × 127 × 349 mm (11⅞ × 5 × 13¾ inches) (w/h/d) AC-340: 120 × 127 × 283 mm (4¾ × 5 × 11⅛ inches) (w/h/d)
Usable cassettes	Tapes with the mark B.

Video

Input	CAMERA/TV: 10-pin connector 1.0 V (p-p) $^{+1.0}_{-0.5}$ V (p-p), 75 ohms, unbalanced, sync negative
Output	VIDEO OUT: BNC connector 1.0 V (p-p) ±0.2 V (p-p), 75 ohms, unbalanced, sync negative CAMERA/TV: 10-pin connector 1.0 V (p-p) ±0.2 V (p-p), 75 ohms, unbalanced, sync negative
Horizontal resolution	Monochrome: 300 lines Color: 240 lines
Signal-to-noise ratio	Better than 43 dB

Audio

Input	MIC: mini jack −60 dBs, suitable for microphone with 600-ohm impedance
Output	CAMERA/TV: 10-pin connector less than 2 k ohms, −5 dBs (100 k ohm load), unbalanced LINE OUT: mini jack less than 2 k ohms, −5 dBs (100 k ohm load), unbalanced EARPHONE: mini jack 8 ohms, −26 dBs

Frequency response	50 to 10,000 Hz
Signal-to-noise ratio	Better than 45 dB
Audio distortion	Less than 3% (at 333 Hz)
Tape transport	
Tape speed	4.0 cm/sec.
Maximum recording (playback) time	60 min. (with Sony L-500 cassette)
Fast-forward time	Within 3′ 30″ (L-500)
Rewind time	Within 3′ 30″ (L-500)

Accessories supplied

Videocassette tape L-250 (30 min.)
RF Unit RFU-534 (channel 3 or 4, selectable)
External antenna connector EAC-24 (75-ohm to 300-ohm matching transformer)
Antenna selector ANS-20
75-ohm coaxial cables (0.5 m, 1.5 m)
Earphone ME-20B
Shoulder strap
Soft cover
Monitor connecting cable VMC-1M
Ac power adaptor AC-340

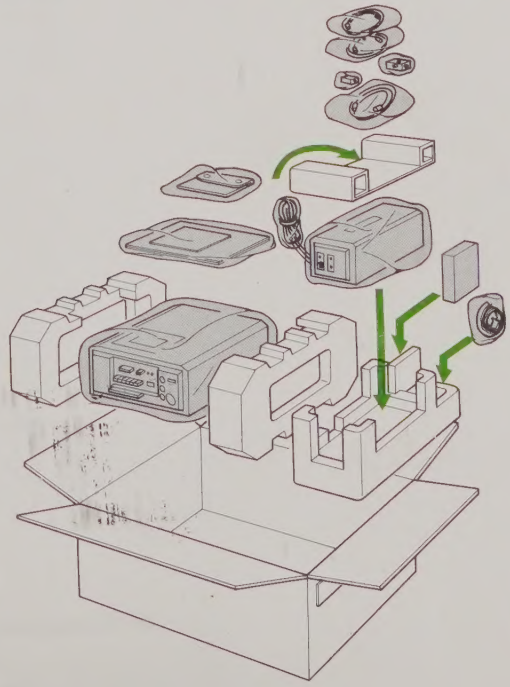
Optional accessories

Rechargeable battery pack BP-60
Color camera DXC-1610
B/W camera AVC-3450
Digital timer DT-32 (for USA) or DT-30 (for Canada)
Car battery adaptor DCC-3000

Design and specifications subject to change without notice.

REPACKING FOR SHIPMENT

The repacking procedure shown below is subject to change. Refer to the illustration on the original carton for latest packing instructions.



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